



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

C45-12-3
Job Sheet 177167



Part No: C45-12-3

Job Qty: ~~See~~ 12

DAS
21
9-89

Part Name: Lock



Part Weight: 0 lbs

Status: At Planning

Priority: Medium

Job Created: 5/8/18

Job Tracking No:

Due Date: 5/25/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG C45-12-3 REV 6 IPP REV A 18.02.14 NEW ISSUE FK VERIFY DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	6 Ea		5/25/18	0.00	0.00	Start Up Machining-1		J.C.-L
100	Bandsaw	6 pcs		5/25/18	0.00	6.00	Bandsaw1		J.C.-L
120	CNC Vertical Machining	6 pcs		5/25/18	2.00	6.00	HAAS1-1		J.C.-L
130	QC	6 pcs		5/25/18	0.00	0.00	QC2 Machining-5		J.C.-L 18-07-01
140	QC	6 pcs		5/25/18	0.00	0.00	QC8 Machining-5		18/07/11
150	Outsource	6 pcs		5/25/18	0.00	0.00	Outsource1		18-7-12
160	Outsource	6 pcs		5/25/18	0.00	0.00	Outsource15		
170	Packaging	6 pcs		5/25/18	0.00	0.00	Packaging2		
180	QC	6 pcs		5/25/18	0.00	0.00	QC6		
190	Packaging	6 pcs		5/25/18	0.00	0.00	Packaging3-2		
200	QC21-SA	6 Ea		5/25/18	0.00	0.00	QC21		

DAS
61
9-89

Part Op 100 - 1- Cut ~~5.2~~ long 5.2"

Descriptions: 120 - 1-Machine as per folio FB FOLIO REV: DWG REV: 2-Machine
Engrave S/N 3-Deburr

150 - 1--Issue P/O to Metcore; P/O 040505 RC 44-46 2-Bead blast 3- Certificate of Conformity is required

NOTE DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech or ATG***

160 - -Issue P/O to Groupe Altech: P/O -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004-.0006 - Certificate of Conformity is required

170 - Receive

190 - Identify and Stock

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-4140-B-1.500X2.000	AISI 4140 Steel Bar	2.6340 ft (.439 ea)	90-Start up Operation	5071990



Container No: S083337



Part: C45-12-3

Job No: 177167

Serial No/Batch: S083337

Revision: 6

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Job Allocations

Component Part	Required	Inventory	Allocated
140-B-1.500X2.000	3	6	0

Part Specifications

Specifications could not be found.

Plex 5/8/18 10:18 AM Dart.lajeunesse.marie

Date: 06/22/18

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____																					
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WORK ORDER NON-CONFORMANCE / UPDATE

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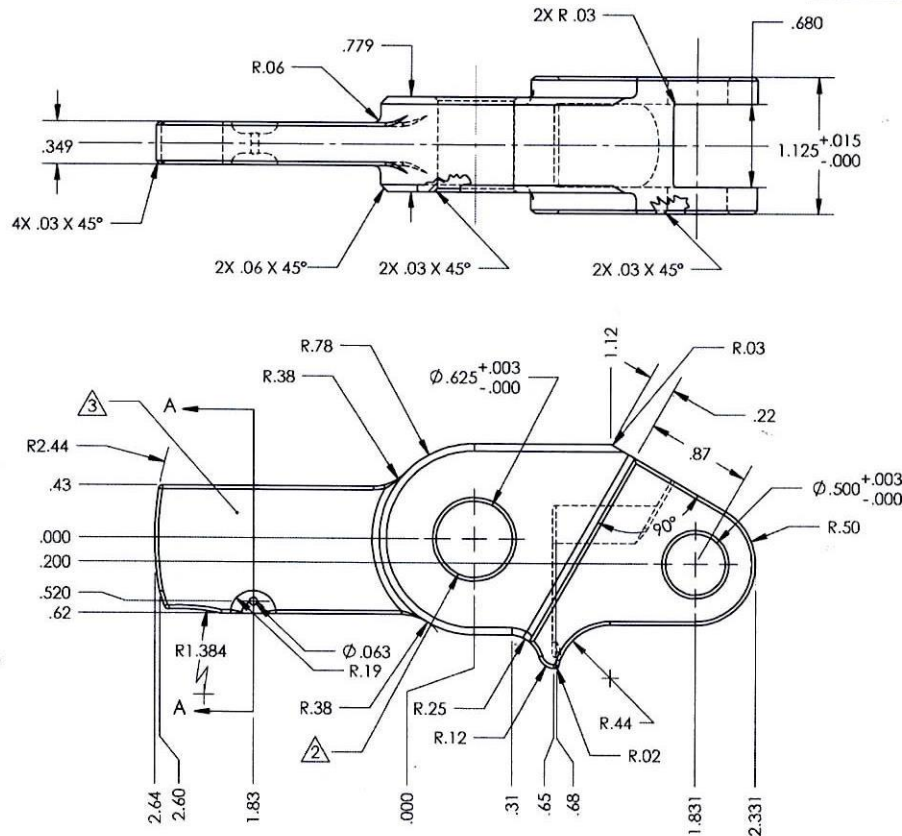
Work Order update only ☐

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Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
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☐ OTHER : _____					

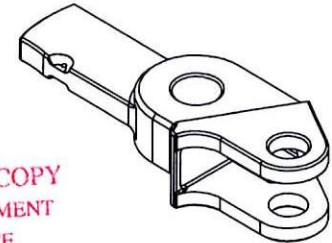
FL100

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REVISIONS				
REV	ECF	DESCRIPTION	DATE	INITIAL
4		AS DRAWN BY CANAM	9/14/2012	JAG
5		CHD MATERIAL FROM 4340, ADDED NOTE, CORRECTED TOP VIEW PROJECTION	11/7/2012	RJC
6	14-C126	CHD TITLE BLOCK WAS RED BARN 5 DART. ADDED MACHINE ENGRAVE NOTE, CHD DIMS WAS .030 X .437 B 4X .03 X 45°, WAS .060 X .45° B 2X .06 X 45°, WAS .030 X .45° B 2X .03 X 45° CHD TOLERANCE ON NON-CRITICAL DIMENSIONS	8/13/2014	UPD



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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 177167 M-5
180508



- NOTES:
1. NICKEL PLATE .0004 - .0006, BAKE AFTER PLATING.
 2. CALIBRATE HOLE AFTER HEAT TREATING AND POLISH ROLLER AREA.
 3. MACHINE ENGRAVE BATCH NUMBER.

DART AEROSPACE	
TITLE LOCK	
DWG NO. C45-12-3	REV 6
MATL. 4140/4142	DRAWN BY: CANAM
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1	APPROVED REAT 44-48 HRC FINISH SEE NOTE 1 SPEC USED ON MODEL
1. BREAK ALL SHARP EDGES .015 X 45° 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:1	DATE 3/6/2000 SHEET 1 OF 1

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	S/O INFORMATION OR SPECIFICATIONS
			C45-12-3	1	LOCK	4140/4142	1-1/4 X 2 X 5-1/8

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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO040505

Supplier: MEI001-VC
Metcor Inc.
560 Boul. Arthur Sauve
Saint-Eustache
QC
J7R 5A8 Canada
Phone: 450 473 1884
Fax: 450 491 5498

PO No: PO040505

PO Date: 7/16/18

Due Date: 7/30/18

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	177167	C45-12-3	Lock 1--Issue P/O to Metcore ; P/O _____ RC 44-46 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech or ATG***	Firmed	-	7/30/18	12 pcs	0 pcs	12 pcs	\$25.00/pcs	\$300.00

DAS
61
9-89

12x JUL 30 2018

Grand Total: \$300.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retension of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

CE

Plex 7/18/18 1:41 PM dart.tsimiklis.chrisoula

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

Certificat de Conformité Détail

Detailed Certificate of Compliance

BON DE TRAVAIL order	CHARGEMENT load
329163	1

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K8A 1K7

30 JUN 2018

LIVRÉ À / shipped to:

1

GROUP ALTECH

2455 ALPERN

ST LAURENT

QC H4S1N9

COMMANDE DU CLIENT customer po	CLASSIFICATION PIECE part classification	MATÉRIEL material	MAÎTRE D'OEUVRE prime contractor	PROGRAM
40505	N/A	4130		
SPECIFICATIONS DU PROCÉDÉ processing specifications				
SEL HARDEN HARDEN AND TEMPER				
EXIGENCE / requirement	SPECIFICATIONS / specified		TESTS EXÉCUTÉS / performed	RÉSULTATS DE TESTS / results
HARDNESS	44 - 46 HRC		12	45 - 46 HRC 61 9.89
QUANTITÉ quantity	POIDS weight	DESCRIPTION DES PIÈCES parts description		
12	10.4	C45-12-3 (12) C45-12-3 JOB 177167 1 BOITE DE CARTON		

COMMENTAIRES / comments

SALT HARDEN 1575F, 50 MIN

TEMPER 550F, 3 HRS

TEMPER 625F, 3 HRS

TEMPER 675F, 3 HRS

TEMPER 725F, 3 HRS

TEMPER 775F, 3 HRS

Heat treatment (HT) was performed with equipment that meets the requirements of requested specification.

All HT operations were performed in compliance with the required HT specification and all verifications have been performed and documented. No unauthorized changes were performed in regards to the HT. We certify that the material was manufactured, sampled, tested and inspected in accordance with the material specification and the purchase order and was found to meet the requirements.

This document and any attached documents may contain confidential or proprietary information and may be subject to export control laws and regulations. If you are not the intended recipient, you are notified that any dissemination, copying of this e-mail and any attachments thereto or use of their contents by any means whatsoever is strictly prohibited. Unauthorized export or re-export is prohibited.

Le traitement thermique (TT) a été fait en utilisant des équipements en conformité avec la spécification demandée.

Toutes les opérations de TT ont été faites en conformité avec les requis de la spécification demandée et toutes les vérifications et les tests demandés ont été faites et documentés. Aucun changement n'a été faite par rapport au TT. On certifie que le matériel a été fabriqué, échantillonné, testé et inspecté en accord avec les spécifications du matériel et le bon de commande et le matériel rencontre les exigences spécifiées.

Ce document et les documents qui lui sont joints peuvent contenir des informations confidentielles, être soumis aux réglementations relatives au contrôle des exportations ou ayant un caractère privé. S'ils ne vous sont pas destinés, nous



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO040651**

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO040651
PO Date: 7/30/18
Due Date: 8/6/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Phone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

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1	177167	C45-12-3	Lock -Issue P/O to Groupe Altech: P/O _____ -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004- .0006 - Certificate of Conformity is required	Firmed	-	8/6/18	12 pcs	0 pcs	12 pcs	\$10.00/pcs	\$120.00
Grand Total:											\$120.00

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 7/31/18 9:08 AM dart.tsimiklis.chrisoula

CT



Certificat de Conformité / Certificate of Compliance

(011414-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

011414- 1

Livré à / Ship to

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
02-Aug-2018		Jessie Boisvert		040651				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	C45-12-3 Rev.	C45-12-3 01 -E-NIC STEEL 500 [E-NICKEL STEEL 500] QQ-N-290 CLASS 2 GRADE E OR F 0.0004 TO 0.0006 THICK DAS 61 9-89	E-NICKEL-500 CH	12	12	0	0	0

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness
Inspecteur Qualité
Quality Inspector
Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

Certificat de Conformité Détail

Detailed Certificate of Compliance

BON DE TRAVAIL order	CHARGEMENT load
329163	1

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

GROUP ALTECH

2455 AV PERN

ST LAURENT

QC H4S1N9

1

vous signalons qu'il est strictement interdit de les divulguer, de les reproduire ou d'en utiliser de quelque manière que ce soit le contenu. Toute exportation ou réexportation non autorisée est interdite.

Isabel Otero

QA Technician



APPROUVÉ par / Approved by:

Isabel Otero

DATE: 2018-07-25

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSÈBE, Q.C., J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450-491-6454

Certificat de Conformité Certificate of Compliance

BON DE TRAVAIL order	CHARGEMENT load
329163	1

CLIENT / customer 215

BART AEROSPACE

170 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

GROUP ALTECH

2455 ALPERN

ST LAURENT

QC H4S1N9

COMMANDE DU CLIENT customer po	CLASSIFICATION PIÈCE part classification	MATÉRIEL material	MAÎTRE D'OEUVRE prime contractor	PROGRAM
40505	N/A	4130		

SPÉCIFICATIONS DU PROCÉDÉ

processing specifications

SEL HARDEN

HARDEN AND TEMPER

EXIGENCE / requirement	SPÉCIFICATIONS / specified	TESTS EXÉCUTÉS / performed	RÉSULTATS DE TESTS / results
HARDNESS	44 - 46 HRC	12	45 - 46 HRC

QUANTITÉ quantity	POIDS weight	DESCRIPTION DES PIÈCES parts description
12	10,4	C45-12-3 (12) C45-12-3 JOB 177167 1 BOITE DE CARTON

COMMENTAIRES / comments

APPROUVÉ par / Approved by:

25 JUILLET
DATE: 2018-07-25

Pierre Piché
Chief Inspector

